

# Employee Post-Travel Disclosure of Travel Expenses

**Post-Travel Filing Instructions:** Complete this form within 30 days of returning from travel. Submit all forms to the **Office of Public Records in 232 Hart Building.**

Date/Time Stamp:  
RECEIVED  
SECRETARY OF THE SENATE  
PUBLIC RECORDS  
2019 SEP 18 PM 4:04

In compliance with Rule 35.2(a) and (c), I make the following disclosures with respect to travel expenses that have been or will be reimbursed/paid for me. I also certify that I have attached:

- ☐ The **original** *Employee Pre-Travel Authorization* (Form RE-1), **AND**  
☐ A **copy** of the *Private Sponsor Travel Certification Form* with all attachments (itinerary, invitee list, etc.)

Private Sponsor(s) (list all): Stanford University

Travel date(s): August 26-29, 2019

Name of accompanying family member (if any): N/A

Relationship to Traveler: ☐ Spouse ☐ Child

IF THE COST OF LODGING **DID NOT INCREASE** DUE TO THE ACCOMPANYING SPOUSE OR DEPENDENT CHILD, ONLY INCLUDE LODGING COSTS IN EMPLOYEE EXPENSES. (Attach additional pages if necessary.)

## Expenses for Employee:

	Transportation Expenses	Lodging Expenses	Meal Expenses	Other Expenses (Amount & Description)
<input type="checkbox"/> Good Faith Estimate	\$599.45	\$600 (\$200/night)	\$191.07	\$86.68
<input checked="" type="checkbox"/> Actual Amount				CA ground transportation

## Expenses for Accompanying Spouse or Dependent Child (if applicable):

	Transportation Expenses	Lodging Expenses	Meal Expenses	Other Expenses (Amount & Description)
<input type="checkbox"/> Good Faith Estimate	N/A	N/A	N/A	N/A
<input type="checkbox"/> Actual Amount				

Provide a description of all meetings and events attended. See Senate Rule 35.2(c)(6). (Attach additional pages if necessary.): The Cyber and Artificial Intelligence Boot Camp for Congressional Staff delivered lectures, discussions, simulations and interactive labs for policymakers and technicians

who require a more in-depth understanding of the complex policy frameworks surrounding cyber threats, computer learning, and online privacy concerns.

9.16.19

(Date)

Clinton A. Trocchio

(Printed name of traveler)



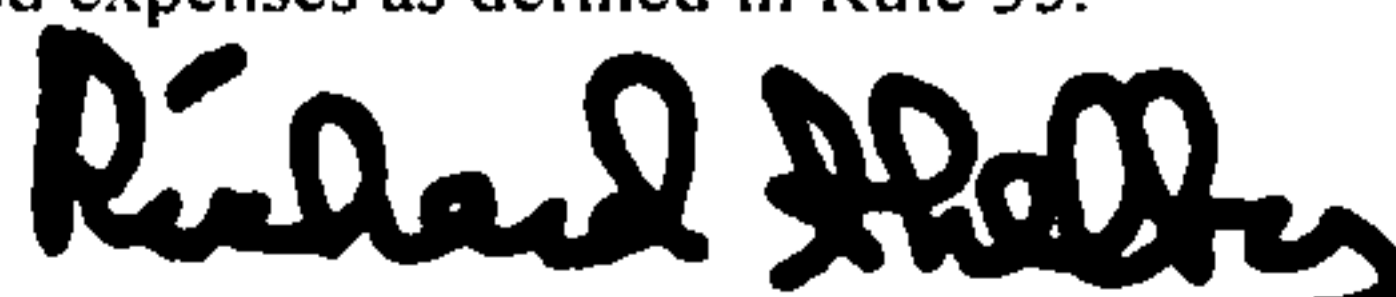
(Signature of traveler)

## TO BE COMPLETED BY SUPERVISING MEMBER/OFFICER:

I have made a determination that the expenses set out above in connections with travel described in the *Employee Pre-Travel Authorization* form, are necessary transportation, lodging, and related expenses as defined in Rule 35.

9/16/19

(Date)



(Signature of Supervising Senator/Officer)

Form RE-1

## AUGUST 26-29, 2019

Institute for  
International Studies

**HOOVER**  
INSTITUTION

Stanford University

Dear Mr. Trocchio,


These sessions will challenge you to learn from and debate key philosophical and policy issues with some of the nation's leading thinkers and practitioners. As a participant you will receive round-trip airfare and ground transportation to Stanford University from Washington, DC; housing on Stanford's campus, and those meals that are part of the program.

**To proceed, please confirm your agreement to attend by completing this form by the close of business on Monday, July 22nd. Due to ethics rules, to maintain your spot, it is imperative that you submit the proper paperwork. Please complete the paperwork provided and items listed below to your ethics committee for review by Wednesday, July 24th. Your submission packet must include:**

- Traveler Form (attached for you to fill out)
- Private Sponsor Certification Form (completed for you and attached)
- Syllabus
- Senate Boot Camp Offers
- Copy of this invitation letter

If you have any questions, do not hesitate to contact me ([rwald@stanford.edu](mailto:rwald@stanford.edu)). Thank you in advance for your prompt response so we can ensure your seat in the boot camp. We look forward to and expect an excellent program.

Sincerely,

  
Russell C. Wald

Russell C. Wald  
Senior Manager, External Affairs  
Hoover Institution, Stanford University

10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28  
 29  
 30  
 31  
 32  
 33  
 34  
 35  
 36  
 37  
 38  
 39  
 40  
 41  
 42  
 43  
 44  
 45  
 46  
 47  
 48  
 49  
 50  
 51  
 52  
 53  
 54  
 55  
 56  
 57  
 58  
 59  
 60  
 61  
 62  
 63  
 64  
 65  
 66  
 67  
 68  
 69  
 70  
 71  
 72  
 73  
 74  
 75  
 76  
 77  
 78  
 79  
 80  
 81  
 82  
 83  
 84  
 85  
 86  
 87  
 88  
 89  
 90  
 91  
 92  
 93  
 94  
 95  
 96  
 97  
 98  
 99  
 100  
 101  
 102  
 103  
 104  
 105  
 106  
 107  
 108  
 109  
 110  
 111  
 112  
 113  
 114  
 115  
 116  
 117  
 118  
 119  
 120  
 121  
 122  
 123  
 124  
 125  
 126  
 127  
 128  
 129  
 130  
 131  
 132  
 133  
 134  
 135  
 136  
 137  
 138  
 139  
 140  
 141  
 142  
 143  
 144  
 145  
 146  
 147  
 148  
 149  
 150  
 151  
 152  
 153  
 154  
 155  
 156  
 157  
 158  
 159  
 160  
 161  
 162  
 163  
 164  
 165  
 166  
 167  
 168  
 169  
 170  
 171  
 172  
 173  
 174  
 175  
 176  
 177  
 178  
 179  
 180  
 181  
 182  
 183  
 184  
 185  
 186  
 187  
 188  
 189  
 190  
 191  
 192  
 193  
 194  
 195  
 196  
 197  
 198  
 199  
 200  
 201  
 202  
 203  
 204  
 205  
 206  
 207  
 208  
 209  
 210  
 211  
 212  
 213  
 214  
 215  
 216  
 217  
 218  
 219  
 220  
 221  
 222  
 223  
 224  
 225  
 226  
 227  
 228  
 229  
 230  
 231  
 232  
 233  
 234  
 235  
 236  
 237  
 238  
 239  
 240  
 241  
 242  
 243  
 244  
 245  
 246  
 247  
 248  
 249  
 250  
 251  
 252  
 253  
 254  
 255  
 256  
 257  
 258  
 259  
 260  
 261  
 262  
 263  
 264  
 265  
 266  
 267  
 268  
 269  
 270  
 271  
 272  
 273  
 274  
 275  
 276  
 277  
 278  
 279  
 280  
 281  
 282  
 283  
 284  
 285  
 286  
 287  
 288  
 289  
 290  
 291  
 292  
 293  
 294  
 295  
 296  
 297  
 298  
 299  
 300  
 301  
 302  
 303  
 304  
 305  
 306  
 307  
 308  
 309  
 310  
 311  
 312  
 313  
 314  
 315  
 316  
 317  
 318  
 319  
 320  
 321  
 322  
 323  
 324  
 325  
 326  
 327  
 328  
 329  
 330  
 331  
 332  
 333  
 334  
 335  
 336  
 337  
 338  
 339  
 340  
 341  
 342  
 343  
 344  
 345  
 346  
 347  
 348  
 349  
 350  
 351  
 352  
 353  
 354  
 355  
 356  
 357  
 358  
 359  
 360  
 361  
 362  
 363  
 364  
 365  
 366  
 367  
 368  
 369  
 370  
 371  
 372  
 373  
 374  
 375  
 376  
 377  
 378  
 379  
 380  
 381  
 382  
 383  
 384  
 385  
 386  
 387  
 388  
 389  
 390  
 391  
 392  
 393  
 394  
 395  
 396  
 397  
 398  
 399  
 400  
 401  
 402  
 403  
 404  
 405  
 406  
 407  
 408  
 409  
 410  
 411  
 412  
 413  
 414  
 415  
 416  
 417  
 418  
 419  
 420  
 421  
 422  
 423  
 424  
 425  
 426  
 427  
 428  
 429  
 430  
 431  
 432  
 433  
 434  
 435  
 436  
 437  
 438  
 439  
 440  
 441  
 442  
 443  
 444  
 445  
 446  
 447  
 448  
 449  
 450  
 451  
 452  
 453  
 454  
 455  
 456  
 457  
 458  
 459  
 460  
 461  
 462  
 463  
 464  
 465  
 466  
 467  
 468  
 469  
 470  
 471  
 472  
 473  
 474  
 475  
 476  
 477  
 478  
 479  
 480  
 481  
 482  
 483  
 484  
 485  
 486  
 487  
 488  
 489  
 490  
 491  
 492  
 493  
 494  
 495  
 496  
 497  
 498  
 499  
 500  
 501  
 502  
 503  
 504  
 505  
 506  
 507  
 508  
 509  
 510  
 511  
 512  
 513  
 514  
 515  
 516  
 517  
 518  
 519  
 520  
 521  
 522  
 523  
 524  
 525  
 526  
 527  
 528  
 529  
 530  
 531  
 532

## PRIVATE SPONSOR TRAVEL CERTIFICATION FORM

This form must be completed by any private entity offering to provide travel or reimbursement for travel to Senate Members, officers, or employees (Senate Rule 35, clause 2). Each sponsor of a fact-finding trip must sign the completed form. The trip sponsor(s) must provide a copy of the completed form to each invited Senate traveler, who will then forward it to the Ethics Committee with any other required materials. The trip sponsor(s) should NOT submit the form directly to the Ethics Committee. Please consult the accompanying instructions for more detailed definitions and other key information.

The Senate Member, officer, or employee **MUST** also provide a copy of this form, along with the appropriate travel authorization and reimbursement form, to the Office of Public Records (OPR), Room 232 of the Hart Building, within thirty (30) days after the travel is completed.

1. Sponsor(s) of the trip (please list all sponsors): Stanford University
2. Description of the trip: An intensive program for Congressional staff which consists of three days of seminars, simulations, and keynote presentations.
3. Dates of travel: August 26-29, 2019
4. Place of travel: Stanford University, Stanford, CA
5. Name and title of Senate invitees: See attached list.
6. I certify that the trip fits one of the following categories:
  - ☐ (A) The sponsor(s) are not registered lobbyists or agents of a foreign principal and do not retain or employ registered lobbyists or agents of a foreign principal and no lobbyist or agents of a foreign principal will accompany the Member, officer, or employee *at any point* throughout the trip.
  - OR -
  - ☒ (B) The sponsor or sponsors are not registered lobbyists or agents of a foreign principal, but retain or employ one or more registered lobbyists or agents of a foreign principal and the trip meets the requirements of Senate Rule 35.2(a)(2)(A)(i) or (ii) (*see question 9*).
7. ☒ I certify that the trip will not be financed in any part by a registered lobbyist or agent of a foreign principal.
  - AND -
  - ☒ I certify that the sponsor or sponsors will not accept funds or in-kind contributions earmarked directly or indirectly for the purpose of financing this specific trip from a registered lobbyist or agent of a foreign principal or from a private entity that retains or employs one or more registered lobbyists or agents of a foreign principal.
8. I certify that:
  - ☒ The trip will not in any part be planned, organized, requested, or arranged by a registered lobbyist or agent of a foreign principal except for *de minimis* lobbyist involvement.
  - AND -
  - ☒ The traveler will not be accompanied on the trip by a registered lobbyist or agent of a foreign principal except as provided for by Committee regulations relating to lobbyist accompaniment (*see question 9*).



15. Briefly describe the educational activities performed by each sponsor (other than sponsoring congressional trips):

Stanford University regularly sponsors policy panels and roundtables for think tanks scholars, journalists,

**Congressional staff, Executive branch officials, academics and members of the public. Additionally**

**Stanford educates numerous undergrad and graduate students within the university.**

**16. Total Expenses for Each Participant:**

	Transportation Expenses	Lodging Expenses	Meal Expenses	Other Expenses
<input checked="" type="checkbox"/> Good Faith estimate.  <input type="checkbox"/> Actual Amounts	\$599.45 Round trip airfare  \$60. ground transportation	\$600 (\$200/night)	\$231	

17. State whether a) the trip involves an event that is arranged or organized *without regard* to congressional participation or b) the trip involves an event that is arranged or organized *specifically with regard* to congressional participation:

The trip involves an event that is arranged/organized specifically with regard to Congressional staff participation.

18. Reason for selecting the location of the event or trip

In order to have a significant number of California-based faculty participate in the event, we are hosting it at the Stanford University campus.

19. Name and location of hotel or other lodging facility:

**Schwab Residential Center, 680 Serra Street, Stanford CA 94305.**

20. Reason(s) for selecting hotel or other lodging facility:

The Schwab Residential Center is owned and operated by Stanford University. It is in close proximity to  
the events that compromise the program, and falls into the per diem guidelines.

21. Describe how the daily expenses for lodging, meals, and other expenses provided to trip participants compares to the maximum per diem rates for official Federal Government travel:

Lodging expenses are less than the federal per diem for Palo Alto, CA. Meal expenses are less than the federal per diem for Palo Alto, CA.

22. Describe the type and class of transportation being provided. Indicate whether coach, business-class or first class transportation will be provided. If first-class fare is being provided, please explain why first-class travel is necessary:

Stanford University will provide economy class round trip airfare between Washington, DC and San Francisco, CA, and round trip ground transportation between Stanford University and SFO

23. ☒ I represent that the travel expenses that will be paid for or reimbursed to Senate invitees do not include expenditures for recreational activities, alcohol, or entertainment (other than entertainment provided to all attendees as an integral part of the event, as permissible under Senate Rule 35).

24. List any entertainment that will be provided to, paid for, or reimbursed to Senate invitees and explain why the entertainment is an integral part of the event:

None.

25. I hereby *certify* that the information contained herein is true, complete and correct. (For trips involving more than one sponsor, you *must* include a completed signature page for each additional sponsor):

Signature of Travel Sponsor: 

Name and Title: Russell Wald, Senior Manager, External Affairs

Name of Organization: Stanford University

Address: 434 Galvez Mall, Stanford, CA 94305

Telephone Number: 202.760.3200

Fax Number: 202.760.3191

E-mail Address: rwald@stanford.edu

**PRIVATE SPONSOR TRAVEL CERTIFICATION FORM**  
**SIGNATURE PAGE FOR ADDITIONAL SPONSOR**  
*(to be completed by each additional sponsor)*

I hereby *certify* that the information contained on pages 1-4 of the certification form and any accompanying addenda, all submitted in connection with the August 26-29, 2019 trip  
to Stanford University, Stanford, CA is true, complete, and correct.  
*Place of Travel**Dates of Travel (Month Day, Year)*

Signature of Travel Sponsor: 

Name and Title: Russell Wald, Senior Manager, External Affairs

Name of Organization: Stanford University

Address: 434 Galvez Mall, Stanford, CA 94305

Telephone Number: 202-760-3200

Fax Number: 202-760-3191

E-mail Address: rwald@stanford.edu

CYBER AND ARTIFICIAL INTELLIGENCE BOOT CAMP  
AUGUST 26-29, 2019

Stanford | Stanford Freeman Spogli Institute for International Studies | HOOVER INSTITUTE HAI

# Cyber and Artificial Intelligence Boot Camp

**August 26-29, 2019**

The Hoover Institution, Annenberg Conference Room 105, Lou Henry Hoover Building  
434 Galvez Mall, Stanford, CA 94305

## LEADERSHIP

### Andrew Grotto

Program Director, Program on Geopolitics, Technology, and Governance, Stanford  
Cyber Policy Center, Freeman Spogli Institute  
William J. Perry International Security Fellow, Center for International Security and  
Cooperation (CISAC)  
Research Fellow, Hoover Institution

### Dr. Herb Lin

Senior Research Scholar for Cyber Policy and Security, Center for International Security  
and Cooperation (CISAC)  
Hank J. Holland Fellow in Cyber Policy and Security, Hoover Institution  
Chief Scientist Emeritus, Computer Science and Telecommunications Board, National  
Academies

## CONTACTS

**Danielle Jablanski, [djablanski@stanford.edu](mailto:djablanski@stanford.edu) +1(650) 725-4839**

Cyber Program Manager, Program on Geopolitics, Technology, and Governance,  
Stanford Cyber Policy Center, Freeman Spogli Institute

**Russell Wald, [rwald@stanford.edu](mailto:rwald@stanford.edu) +1 (202) 760-3204**

Senior Manager for External Affairs  
Hoover Institution, Stanford University

## DAY 1 (Monday, August 26): Cyber Offense and Defense

9:49 a.m. - Arrive on Group Flight: United Airlines 1881 to San Francisco International Airport

### 11:30 am – 12:00 pm INTRODUCTION AND PROGRAM OVERVIEW

#### Faculty:

- **Andrew Grotto**, William J. Perry International Security Fellow, Center for International Security and Cooperation (CISAC), Research Fellow, Hoover Institution
- **Dr. Herb Lin**, Senior Research Scholar, CISAC; Hank J. Holland Fellow, Hoover Institution

### 12:00 pm – 12:30 pm LUNCH KEYNOTE & WELCOME

#### Opening Remarks:

- **H.R. McMaster**, Fouad and Michelle Ajami Senior Fellow, Hoover Institution; Former assistant to the president for National Security Affairs; Retired Lieutenant General, U.S. Army

### 12:30 pm – 1:30 pm THINKING LIKE AN ATTACKER

#### Faculty:

- **Dr. Greg Conti**, Senior Security Strategist, IronNet Cybersecurity
- **Dr. Herb Lin**, Stanford University
- **Andrew Grotto**, Stanford University (Moderator)

Effectively combating any adversary requires understanding the ways in which that adversary thinks. Cybersecurity adversaries — from state agents seeking to disable military systems to hacktivists seeking to make a political point — share a security mindset: a predilection for examining the ways in which the security of a system can be circumvented or penetrated. Whereas good engineering is about how a system can be made to work, the security mindset involves thinking about how some aspect of a system can be made to fail. Understanding this mindset is the first step towards designing sound cybersecurity solutions.

**Assignment:** While in transit to the course location in Palo Alto, conduct a thought experiment for bringing an item prohibited by TSA regulations onto the airplane.

Learning Objectives: Why defense is more difficult than offense and what makes ongoing offense-defense competition inevitable.

**1:30 pm – 1:45 pm BREAK**

**1:45 – 3:00 pm KEYNOTE: CURRENT THREAT LANDSCAPE**

- Kevin Mandia, CEO, FireEye
- Sean Kanuck, Visiting Fellow, Hoover Institution; Former National Intelligence Officer for Cyber Issues, Office of the Director of National Intelligence
- Dr. Herb Lin, Stanford University (Moderator)

Threat actors and their specific activity signatures, global hot spots and trends, are analyzed daily by various security agencies, governments, and organizations. This keynote will direct our attention to today's principal threat actors, providing a bird's eye view of the threat landscape, current trends and capabilities, future outlook of malicious cyber activity, and seeks to bust certain myths sometimes circulated or recounted incorrectly about cyber operations. Speakers will also provide first-hand examples of experiences tracking threats and bad actors, and share insights about working in this field.

**3:00 pm – 3:15 pm BREAK**

**3:15 pm – 4:15 pm THREATS TO CYBERSECURITY**

Faculty:

- Carey Nachenberg, Chief Scientist, Chronicle; Adjunct Assistant Professor of Computer Science, UCLA
- Dr. Tom Berson, Visiting Scholar, Stanford CISAC; Advisory Board Member, Salesforce; Founder, Anagram Laboratories
- Dr. Herb Lin, Stanford University (Moderator)

Cybersecurity compromises can take a variety of forms and occur for a variety of reasons. This session examines various known techniques and vulnerabilities in information technology that allow them to happen, painting a picture of a well-known cybersecurity theme: offense

Learning Objectives: Security-relevant principles of information technology; types of compromises; inherent vulnerabilities of information technology; the hidden complexity of cyberspace; anatomy of security compromises; and the spectrum of threats to cybersecurity.

**4:30 pm – 5:30 pm DINNER: OFFENSIVE DIMENSIONS OF CYBERSECURITY**

- **Dr. Herb Lin**, *Stanford University*
- **Jason Kichen**, *Vice President, Advanced Security Concepts, eSentire*
- **Andrew Grotto**, *Stanford University (Moderator)*

**Learning Objectives:** The role of offensive operations in cyberspace for improving the nation's cybersecurity posture, signaling, and other purposes; the differences between penetration and exploitation and their important distinctions; the scope and nature of U.S. command and control of offensive operations in cyberspace.

### 6:00 pm – 8:30 pm HOSPITAL RANSOMWARE SIMULATION

The hospital has been the victim of a cyber-attack in the form of ransomware which successfully encrypts 250,000 files and holds at least one system hostage, demanding a ransom payment in Bitcoin (BTC) in return for a decryption key which will unlock its systems and restore access and functionality to the system. The hospital has a timeline of 72 hours to pay the ransom before their files become permanently encrypted and inaccessible, or are moved off their network.

Subject matter experts will act as the hospital's Chief Executive Officer and Chief Strategy Officer during the simulation, and staffers will be divided into teams to assist with directing action items, press releases, and critical decisions on how to manage the attack and response. Each team will have a coach aiding their organization and strategy. All names and information will be fictional, however, the simulated attack is based on previous real life scenarios. The information made available to participants is subject to change throughout the simulation. At the end of the exercise, teams will present their decision making processes to the hospital's CEO and Board of Trustees, and debrief on what it is like to face this type of cyber scenario in the real world.

## DAY 2 (Tuesday, August 27): Technical & Nontechnical Approaches

**8:30 am – 9:00 am BREAKFAST AND DAY 1 DEBRIEF**

- **Andrew Grotto**, William J. Perry International Security Fellow, Center for International Security and Cooperation (CISAC), Research Fellow, Hoover Institution
- **Dr. Herb Lin**, Senior Research Scholar, CISAC; Hank J. Holland Fellow, Hoover Institution

**9:00 am – 11:00 am HANDS ON HACK LAB**

**Faculty:**

- **Alex Stamos**, Visiting Scholar, Hoover Institution; Adjunct Professor, Stanford University; Director, Internet Observatory, Cyber Policy Center, Freeman Spogli Institute

Stamos' course provides an introduction to the most common types of attacks used in cybercrime and cyberwarfare. As a long-time security practitioner, he covers the basics of an area of technology and how it has been misused. Participants will complete a lab session from his Stanford course in which they will be guided through attacking a known insecure system using techniques and tools seen in the field.

Participants will be required to bring a Windows or Mac laptop and will be provided with basic information for the exercise 2 weeks prior to the session. No computer science background is necessary for this session.

**11:00 am – 11:15 pm BREAK**

**11:15 am – 12:15 pm LUNCH: CYBER RISK, ECONOMICS, AND ORGANIZATIONAL DIMENSIONS OF CYBERSPACE**

**Faculty:**

- Dr. Tyler Moore, Tandy Assistant Professor of Cyber Security and Information Assurance, University of Tulsa
- Dr. Greg Falco, Security Researcher, Stanford CISAC
- Dr. Herb Lin, Stanford University (Moderator)

Known cybersecurity measures are often not fully adopted due to a variety of economic and organizational factors. These factors are non-technical in nature and often underappreciated by technical and policy communities. Economics describe the incentives that apply to cyber defenders and adversaries, including the nature of cybersecurity market failures and the ability to handle collective action problems. The insurance sector is working to provide accurate and adequate coverage for this market. This session examines how these factors often discourage the adoption of sound security practices.

Learning Objectives: The importance of economic and organizational factors of cybersecurity and why they are often overlooked in efforts to improve cybersecurity; how government action might help to address non-technical factors that diminish the nation's cybersecurity posture.

**12:15 pm – 12:30 pm BREAK**

**12:30 pm – 1:30 pm PRIVACY & SECURITY FOR CONSUMERS, CUSTOMERS, AND CRITICAL INFRASTRUCTURE**

**Faculty:**

- Robert Chesney, Associate Dean and Charles I. Francis Professor, University of Texas School of Law; Director, Robert S. Strauss Center for International Security and Law
- Ted Gizewski, Vice President, Product Legal, Salesforce
- Andrew Grotto, Stanford University (Moderator)

Privacy and security risks manifest differently in different business sectors. They also share important interdependencies that require integrated risk management and policy-making strategies.

Learning objectives: Gaining insight into how privacy and security risks affect different sectors, how risk management strategies must be tailored to the risk environment, and why an integrated approach to managing privacy and security risks is imperative.

**1:30 pm – 1:45 pm BREAK**

**1:45 pm – 2:45 pm INTERNATIONAL LAW AND CYBERSECURITY**

Faculty:

- **Dr. Tess Bridgeman**, Senior Fellow, Center on Law and Security, NYU
- **Dr. Herb Lin**, Stanford University
- **Andrew Grotto**, Stanford University (Moderator)

Technological change has far outpaced updates to laws and regulatory frameworks, and will almost certainly continue to do so in the future. This lag consequentially challenges Congress to craft legislation appropriate for future technologies. Furthermore, nations have cooperative and competitive (and sometimes adversarial) interests that play out in cyberspace, devoid of national borders, giving an international dimension to every cybersecurity and policy challenge.

Learning Objectives: The implicit technological assumptions of existing cybersecurity laws; what problems arise in applying existing international law to technological circumstances not contemplated at the time of initial passage. These include the law of armed conflict, human rights, proposals for internet governance; and different non-governmental organizations that affect the design and operation of the Internet.

**2:45 pm – 3:45 pm FUNDAMENTALS OF DEFENSE FOR CYBERSECURITY**

Faculty:

- **Dr. Irving Lachow**, Visiting Fellow, Hoover Institution; Affiliate, CISAC; Portfolio Manager, International Cybersecurity, MITRE
- **Andrew Grotto**, Stanford University
- **Dr. Herb Lin**, Stanford University (Moderator)

Cybersecurity can be a deeply technical subject, especially in how cybersecurity solutions are implemented, a few fundamental principles underlie most solutions. This session takes a deep dive into the principles of improving cybersecurity and how they fit together. These include reducing reliance on information technology, detecting cybersecurity compromises, and

blocking and limiting the impact of compromise. Additional topics include authentication, access control, forensics, recovery, containment, resilience, and active defense.

Learning Objectives: The value of these fundamental principles of cybersecurity, understanding interdependencies, and how to use fundamentals and understanding collectively to improve security.

**3:45 pm – 4:00 pm BREAK**

**4:00 pm – 5:00 pm CYBER ENABLED INFORMATION WARFARE AND INFLUENCE OPERATIONS**

Faculty:

- Dr. Rosanna Guadagno, Director, Information Warfare Working Group, Stanford University
- Dr. Herb Lin, Stanford University
- Andr w Grotto, Stanford University (Moderator)

Cyber-enabled information warfare is fundamentally different than cyber war and cyber conflict, at least as the latter are generally understood today in the policy world. Cyber war and cyber conflict target information and information technology systems, whereas cyber-enabled information warfare targets human minds. Russia did not "hack" Facebook and YouTube and Twitter by penetrating their security—it used those platforms exactly as they were designed to be used. This session delves into these differences, placing the emphasis on the psychological vulnerabilities of people that the Russians (and other institutional users of social media) exploit for gain.

Learning Objectives: Understanding the fundamental differences between cyber war and cyber-enabled information warfare; the psychology underlying cyber-enabled information warfare; and the present inadequacies of the U.S. government in coping with such warfare.

**5:00 pm – 6:30 pm BREAK**

**6:30 pm – 8:30 pm KEYNOTE RECEPTION/DINNER – ARTIFICIAL INTELLIGENCE**

- **Dr. John Etchemendy**, *Co-Director, Stanford Institute for Human-Centered Artificial Intelligence; Provost Emeritus, and Patrick Suppes Family Professor in the School of Humanities, Stanford University*
- **Reid Hoffman**, *Co-founder and former Executive Chairman, LinkedIn*
- **Ambassador Michael McFaul**, *Senior Fellow, Freeman Spogli Institute for International Studies; Senior Fellow, Hoover Institution, Stanford University (Moderator)*

Artificial intelligence technologies are augmenting human capability and efficiency, changing the way we think about and interact with information, and creating new governance challenges and opportunities for policy makers and business leaders. Please join two distinguished thought leaders to discuss critical issues facing the future of human-centered AI development, innovation, and governance.

[illegible]

**9:00 am – 9:30 am BREAKFAST AND DAY 2 DEBRIEF**

- **Andrew Grotto**, William J. Perry International Security Fellow, Center for International Security and Cooperation (CISAC), Research Fellow, Hoover Institution
- **Dr. Herb Lin**, Senior Research Scholar, CISAC; Hank J. Holland Fellow, Hoover Institution

**9:30 am – 10:45 am INDUSTRY PERSPECTIVES PANEL**

- **Dr. Sameer Bhalotra** (Chair), Co-Founder and CEO, ActZero.ai; Affiliate, CISAC; Senior Associate of the Strategic Technologies Program, CSIS; former Senior Director for Cybersecurity, National Security Council
- **Frank Chen**, Partner, Andreessen Horowitz
- **Michelle Finneran Denedy**, Vice President, Chief Privacy Officer, Cisco
- **Rick Howard**, Chief Security Officer, Palo Alto Networks
- **Dr. Mark Rosekind**, Chief Safety Innovation Officer, Zoox

Market forces have a critical role in enhancing or weakening security and privacy considerations. This session examines how such forces play out at the level of the individual firm and incorporate the views and concerns of the business community. Silicon Valley senior executives and engineers will give their "ground truths" about the security problems facing the private sector.

Learning Objectives: Various private sector perspectives on technology and relations beyond Silicon Valley from technology firms that support innovative efforts for providing IT-based products and services with attention to cybersecurity and AI.

**10:45 am – 11:00 am BREAK**

**11:00 am – 12:00 pm FUNDAMENTALS OF AI AND MACHINE LEARNING**

- **Dr. Emma Brunskill**, Assistant Professor, Computer Science, Stanford University; Stanford AI for Human Impact Lab
- **Dr. Jeff Clune**, Harris Associate Professor, Computer Science, University of Wyoming; Senior Research Manager, Uber AI Labs
- **Andrew Grotto**, Stanford University, (Moderator)

Learning Objectives: Practical applications and limits of machine learning, the broad strokes of development of deep neural networks, and the overall veracity of both development and applications of this technology. Faculty will also speak to the trajectory of the technology, and any risks it may pose from a technical perspective.

**12:15 pm – 1:15 pm KEYNOTE LUNCH: ARTIFICIAL INTELLIGENCE AND SAFETY**

- **Dr. Fei-Fei Li**, Co-Director, Stanford Human-Centered Artificial Intelligence Initiative, Stanford University; Professor, Computer Science, Stanford University
- **Mykel Kochenderfer**, Assistant Professor of Aeronautics and Astronautics, Stanford University; Director, Stanford Intelligent Systems Laboratory
- **Andrew Grotto**, Stanford University (Moderator)

information about the environment and with uncertainty about how the environment will evolve. In addition, these systems must carefully balance safety with other considerations, such as operational efficiency. Typically, the space of edge cases is vast, placing a large burden on human designers to anticipate problem scenarios and develop ways to resolve them.



**4:15 pm – 5:30 pm VISIT TO CENTER FOR AUTOMOTIVE RESEARCH AT STANFORD**

**Faculty:**

- **Dr. Stephen Zepf**, Executive Director, Center for Automotive Research, Stanford University
- **Bryan Casey**, Lecturer in Law, Stanford University
- **Marco Pavone**, Associate Professor, Aeronautics and Astronautics, Stanford University

The Center for Automotive Research at Stanford (CARS) brings together researchers, students, industry, government and the community to enable a future of human-centered mobility. Understanding how people and machines work together has never been so important than when building vehicles of the future. CARS supports educational experiences for students, infrastructure for research and events that bring students and campus researchers together with industry professionals and the broader community. Researchers and vehicles affiliated with CARS are housed at the Automotive Innovation Facility, which houses the Volkswagen Automotive Innovation Lab (often referred to as 'VAIL'), a state-of-the-art vehicle research facility where interdisciplinary teams can work on projects that move vehicle human-centered mobility forward.

Participants will visit CARS' Automotive Innovation Facility and hear from researchers on the cutting edge of the development of autonomous vehicles. Experts will brief the group on trends in the field, ongoing legal and ethical debates, and provide a tour of the facility showcasing vehicles and a driving simulator used for research.

**6:00 pm – 8:00 pm DINNER AND REFLECTIONS**

## Coupa Café

**198 Junipero Serra Blvd, Stanford, CA, 94305**

**Thursday, August 29: Shuttle will arrive to Schwab Residential Hall at 6:30am to depart for San Francisco International Airport**

**9:30 a.m. - Depart on Group Flight: United Airlines 516 to Dulles International Airport**

Tristan	Abbey	Energy & Natural Resources Committee
Karolina	Arias	Senator Van Hollen Subcommittee on Securities, Investment, and Insurance
Jackie	Barber	Committee on Rules & Administration
Virgilio	Barrera	Senator Martin Heinrich
Jacob	Barton	Senate Select Committee on Intelligence
Greta	Bedekovics	Senate Committee on Rules and Administration
Michelle	Benecke	Homeland Security and Governmental Affairs Committee
Emily	Clise	Senate Select Committee on Intelligence
Katherine	Harris	Senate Select Committee on Intelligence
Sunmin	Kim	Sen. Schatz
Jackie	Maffucci	HSGAC
Charlotte	Oldham-Moore	Senate Foreign Relations Committee
Jacob	Olidort	Office of Senator Josh Hawley
Cherilyn	Pascoe	Senate Commerce Committee
William	Payne	Sen. Ben Sasse/Senate Judiciary Committee
John	Riordan	Senate Armed Services Committee
Jacqueline	Russell	Senate Appropriations
Stephen	Smith	Senator King
Moon	Sulfab	Senator Mitch McConnell
Chad	Tanner	Select Committee on Intelligence
Clint	Trocchio	Committee on Appropriations
Matthew	Williams	Sen. Kamala Harris
Robert	Winkler	Senate Armed Services Committee

- Senior Professional Staff
- Policy Advisory and Minority Staff Director
- Chief Counsel
- Legislative Director
- Professional Staff
- Professional Staff Member
- Senior Counsel
- Professional Staff Member
- Counsel for the Minority
- Technology Policy Advisor
- Policy Advisor
- Senior Professional Staff Member
- Foreign Policy Advisor
- Senior Professional Staff Member
- Chief Counsel
- Professional Staff Member; Strategic forces SubCmte Lead
- Professional Staff Member
- Senior Policy Advisor
- Systems Administrator
- Professional Staff Member
- Deputy Clerk and Head of Analytics
- National Security Advisor
- Professional Staff Member